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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER
MULLEN, T

ART UNIT	PAPER NUMBER
2736	

DATE MAILED: 03/16/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. <u>132 916</u>	Applicant(s) <u>Rubanne et al.</u>
Examiner <u>Mullen</u>	Group Art Unit <u>2736</u>

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-19 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-6, 8-11 and 13-19 is/are rejected.
- ☒ Claim(s) 7 and 12 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☒ See the attached Notice of Draftsperson's Patent Drawing Review Subst. PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 2
- ☒ Notice of References Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review Subst. PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit 2736

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Errors noted by the examiner include,

Page 3, line 18, the period in the middle of the patent number should be a comma.

Page 14, line 10, it appears that both occurrences of "62" should be --66--.

Page 17, line 5, it appears that "120" should be --121--.

3. The drawings are objected to because the following words are misspelled in the drawings: "Satellite" (see "Satelite" at the top of Fig. 1); "Transceiver" (see both occurrences of "Tranceiver" in blocks 66 of Fig. 1); and "Response" (see "Responce" in block 222 in Fig. 4). Correction is required.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect can be deferred until the application is allowed by the examiner.

4. Claims 2-3 and 7 are objected under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2-3 and 7, "the processor of the parent unit" lacks antecedent basis.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claim 18 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There appears to be no support in the specification for reciting that the “controls” of the parent unit can selectively activate a child unit while “deactivating the locator signal” of that or some other child unit. Firstly, it is unclear how a given child unit may be selectively activated while at the same time having its locator signal deactivated, if that is what is intended in claim 18. More generally, there appears to be no teaching that the “locator signal” 34 from the first communicating device of a child unit may be “deactivated” under any circumstances by the parent unit. Attention is directed to page 10 of the specification, lines 12-15; page 15, lines 8-12; and page 26, line 20 to page 27, line 4.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-4, 6, 8, 10 and 13-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Creek et al.

Creek et al. disclose a tracking system, note parent (“master”) unit 24 and child (“satellite”) units 10. The child units have (Figs. 1 and 3) a first communicating device 100,102 for sending a “locator” signal and receiving a “control” signal (see col. 2, lines 25-43; col. 4, lines 8-15; and col. 5, line 16 to col. 6, line 19). The parent unit has (Figs. 2 and 4) a second communicating device 84,90 for receiving the “locator” signal from the child units, electronic means 92 for monitoring the child units and determining whether the child units are within a

selected range, an alarm 28,56 responsive to the child unit being outside a preselected range, and “controls” 52, 54,98 for selectively “activating” the child units, i.e. the parent unit sends out a “search identity code” which must match a “unique identity code” of a child unit in order to “activate” it whereby the child unit sends back a response signal. See the Abstract; col. 2, lines 44-65; col. 4, line 16 to col. 5, line 3; and col. 6, line 20 to col. 7, line 41.

Regarding claim 2, electronic means 92 is a microprocessor.

Regarding claim 3, electronic means 92--either by itself, or in combination with other elements shown in Fig. 4 of Creek et al.--inherently “comprises” some type(s) of analog and/or digital circuitry.

Regarding claim 4, the first and second communicating devices (100,102 and 84,90, respectively) are first and second “transceivers” in that they include both a transmitting component and a receiving component.

Regarding claim 6, the first communicating device 100,102 includes a “control mechanism”, which may be in the form of response button 20 or software controlling the microcontroller 104, for sending a signal via transmitter 100 to the second communicating device 84,90.

Regarding claim 8, note speaker 56.

Regarding claim 10, note “lightable bars” 36.

Regarding claim 13, note satellite select buttons 54, range control button 52, lightable bars 36, etc. which together constitute a “tracking mechanism” for assisting the person holding the parent unit to locate a child unit.

Regarding claim 14, the “tracking mechanism” of Creek et al. includes an alarm mechanism 56.

Regarding claim 15, note display 28.

Regarding claim 16, note range adjuster 52.

Regarding claim 17, the first and second communicating devices (100,102 and 84,90, respectively) send and receive “digital” (coded) signals, and therefore are inherently “digital”

communicating devices.

Regarding claim 18, since Creek et al. use unique “identity codes” to enable a child unit 10 to respond to the interrogation from a parent unit 24 (via the “first communicating device”), it is inherent that the selective “activation” of one child unit simultaneously requires the “deactivation” of the locator signal of the “first communicating device” of other child units.

Regarding claim 19, “lightable bars” 36 constitute a variable alarm that varies according to the distance between the parent unit and the child unit.

9. Claims 1, 3-4, 6, 8, 10, 13, 15, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sherburne et al.

Sherburne et al. disclose a system for monitoring and locating a person, note parent (“base station”) unit 12 and child (“transceiver”) units 30A-C. The child units have (Fig. 4) a first communicating device 32C,33C for sending a “locator” signal and receiving a “control” signal. The parent unit has (Fig. 2) a second communicating device 19,18 for receiving the “locator” signal from the child units; electronic means for monitoring the child units and determining whether the child units are within a selected range (although Sherburne et al. fail to explicitly show the “electronic means” of the parent unit 12, this unit is clearly an electronic device which carries out the function of “monitoring the child units and determining whether the child units are within a selected range”--see the Abstract and col. 2, line 6 to col. 3, line 19--and thus the claimed “electronic means” are considered inherent in Sherburne et al.); an alarm 29,50 responsive to the child unit being outside a preselected range; and “controls” 16,17 for selectively “activating” the child units--in particular, the parent unit sends out an interrogation signal containing “unique digitized coded information”, which “activates” a particular child unit to respond with its own “unique digitized coded information” (col. 5, lines 57-64).

Regarding claim 3, the processor/electronic means of Sherburne et al. inherently “comprises” some type(s) of analog and/or digital circuitry.

Regarding claim 4, the first and second communicating devices (32C,33C and 19,18,

respectively) are first and second "transceivers" in that they include both a transmitting component and a receiving component.

Regarding claim 6, the first communicating device includes a "control mechanism" (voice activated microphone 34C), for sending a signal to the parent unit (col. 6, lines 55-59).

Regarding claim 8, note speaker 50.

Regarding claim 10, note LEDs 29.

Regarding claim 13, note custom set button 16, option button 17, LEDs 29, etc. which together constitute a "tracking mechanism" for assisting the person holding the parent unit to locate a child unit.

Regarding claim 15, note display 29.

Regarding claim 17, the first and second communicating devices (32C,33C and 19,18, respectively) send and receive "digital" (coded) signals, and therefore are inherently "digital" communicating devices.

Regarding claim 18, since Sherburne et al. use unique "digitized coded information" to enable a child unit 30A-C to respond to the interrogation from a parent unit 12 (via the "first communicating device"), it is inherent that the selective "activation" of one child unit simultaneously requires the "deactivation" of the locator signal of the "first communicating device" of other child units.

10. Claims 1-4, 6, 8 and 16-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Sallen et al.

Sallen et al. disclose a tracking system, note parent unit 10 and child units 100. The child units have (Figs. 1 and 3) a first communicating device 103,101 for sending a "locator" signal ("second rf signal") and receiving a "control" signal ("first rf signal"); see col. 3, lines 15-22. The parent unit has (Figs. 1-2) a second communicating device 11,13 for receiving the "locator" signal from the child units, electronic means 15 for monitoring the child units and determining whether the child units are within a selected range, an alarm 17 responsive to the child unit being outside a

preselected range, and “controls” 42,44 for selectively “activating” the child units--in particular, the parent unit sends out an interrogation signal comprising a modulated carrier encoded with a “digital signature” (see col. 1, lines 55-58), i.e. the signals sent between the units include address data (Fig. 4), which “activates” a particular child unit to respond only when “the decoded output (of the interrogation signal received from the parent unit) meets criteria stored in the child unit” (col. 1, lines 58-67).

Regarding claim 2, electronic means 15 includes a microprocessor 46.

Regarding claim 3, electronic means 15--shown within the dotted outline 15a in Fig. 2--inherently “comprises” some type(s) of analog and/or digital circuitry.

Regarding claim 4, the first and second communicating devices (103,101 and 11,13, respectively) are first and second “transceivers” in that they include both a transmitting component and a receiving component.

Regarding claim 6, the first communicating device 103,101 includes a “control mechanism” 119, for sending a signal via transmitter 103 to the second communicating device 11,13.

Regarding claim 8, alarm 17 is audible and thus inherently comprises a “speaker”.

Regarding claim 16, note range adjuster 42,44.

Regarding claim 17, the first and second communicating devices (103,101 and 11,13, respectively) send and receive “digital” (coded) signals, and therefore are inherently “digital” communicating devices.

Regarding claim 18, since Sallen et al. use unique “digital signatures” to enable a child unit 100 to respond to the interrogation from a parent unit 10 (via the “first communicating device”), it is inherent that the selective “activation” of one child unit simultaneously requires the “deactivation” of the locator signal of the “first communicating device” of other child units.

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Creek et al., Sherburne et al. or Sallen et al., further in view of Lepkofker.

Creek et al., Sherburne et al. and Sallen et al. are relied upon as set forth in paragraphs 8-10 above, and thus teach all the subject matter claimed except for using global positioning system (GPS) technology in the parent and child units, in order to determine a "relative position" between the units. However, the use of GPS in this environment is well known in the art as taught by Lepkofker, note in Lepkofker Fig. 3A which shows a "child" unit 20 (to be carried by a person whose location is to be monitored, see Fig. 2B) having a global position generator 225, and Fig. 3B which shows the global positioning system 201. One skilled in the art would have appreciated that GPS allows for a more precise and reliable means of locating a person to be monitored, and therefore it would have been obvious in view of Lepkofker to use GPS technology with the child and parent units in any of Creek et al., Sherburne et al. or Sallen et al.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Creek et al., Sherburne et al. or Sallen et al., further in view of Perez et al.

Creek et al., Sherburne et al. and Sallen et al. are relied upon as set forth in paragraphs 8-10 above, and thus teach all the subject matter claimed except for using a "vibrator" as the out-of-range indicator in the parent unit. However, the use of vibratory (i.e. silent) signalling in this environment is well known in the art as taught by Perez, note in Perez "parent" unit 1 having a vibration select switch 7 for providing a vibration as the out-of-range indicator to the parent (see lines 6-9 of the Abstract). One skilled in the art would have appreciated that vibratory signalling would avoid embarrassment to the parent in a public place, which would otherwise result from actuating an audible indication at the parent unit, and therefore it would have been obvious to one

skilled in the art to implement a vibratory signal in the parent unit of any of Creek et al., Sherburne et al. or Sallen et al.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Creek et al. in view of Perez et al.

Claim 11 calls for using different forms of indication (vibrator, light, speaker) in the parent unit in response to a child unit going outside respectively different "ranges" from the parent unit. In Creek et al., the number of "individually lightable bars" 36 in the parent unit display which are lit up depend on the distance of the child unit from the parent unit, from which it is implied that each "bar" 36 is individually responsive to a child unit going outside successively increasing "ranges" from the parent unit, i.e. each bar 36 is actuated at different distances of the child unit from the parent unit. While the different bars 36 present the same general type of indication (i.e. a light), it would have been obvious to utilize different general types of indications (e.g., vibrator, light, speaker) for respectively different distances or ranges in Creek et al., since one skilled in the art would have appreciated that different types of indications enable a parent to more easily distinguish between a "range" which is not necessarily a cause for concern and a "range" which is definitely a cause for concern. The use of different types of indicators in this art is well known, e.g. Perez et al. teach the use of either audible or vibratory alarms by means of a switch 7. Therefore, it would have been obvious in view of Perez et al. for Creek et al. to utilize different general types of indications in response to different "ranges", in order for a parent to more easily distinguish between a "range" which is not necessarily a cause for concern and a "range" which is definitely a cause for concern.

15. Claims 7 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuhnert is cited to further show the state of the art.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Mullen whose telephone number is (703) 305-4382. The examiner can normally be reached on Mon-Thur from 6:30AM to 4:00PM. The examiner can also be reached on alternate Fridays (6:30-3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on (703) 305-4717.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:


(703) 308-9051 (for formal communications intended for entry)

Or:

(703) 308-6743 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

T. Mullen
March 11, 1999


Thomas J. Mullen, Jr.
Primary Examiner
Art Unit 2736